ELSEVIER

Hydrometallurgy 45 (1997) 365–366

hydrometallurgy

Contents Volume 45, 1997

Research Papers

Effect of microwaves on the rate of dissolution of metal oxides (Co_3O_4 and CeO_2) in nitric acid
L. Joret, G. Cote and D. Bauer 1

Influence of mechanoactivation on rare earths leaching from phosphogypsum
D. Todorovsky, A. Terziev and M. Milanova 13

Critical evaluation of thermodynamics of complex formation of metal ions in aqueous solutions. I. A description of evaluation methods
M. Wang, Y. Zhang and M. Muhammed 21

Critical evaluation of thermodynamics of complex formation of metal ions in aqueous solutions. II. Hydrolysis and hydroxo-complexes of Cu^{2+} at 298.15 K
N.V. Plyasunova, M. Wang, Y. Zhang and M. Muhammed 37

Critical evaluation of thermodynamics of complex formation of metal ions in aqueous solutions. III. The system Cu(I,II)–Cl^-–e at 298.15 K
M. Wang, Y. Zhang and M. Muhammed 53

Analysis of diluent effects and estimation of distribution constants of 8-hydroxyquinoline and its derivatives in extraction systems
B. Wionczyk and W. Apostoluk 73

The behaviour of thiocyanate and cyanate during jarosite precipitation
J.E. Dutrizac and D.J. Hardy 83

Recovery of iron from bio-oxidized sulphuric pickling waste water by precipitation as basic sulphates
A. López-Delgado, F.J. Alguacil and F.A. López 97

Solvent extraction of titanium by tributylphosphate, trioctylphosphine oxide and decanol from chloride media
K.M. Allal, D. Hauchard, M. Stambouli, D. Pareau and G. Durand 113

Solubility of hematite in LiOH, NaOH and KOH solutions
K. Ishikawa, T. Yoshioka, T. Sato and A. Okuwaki 129

Recovery of spent acid by electrodialysis in the zinc hydrometallurgy industry: performance study of different cation-exchange membranes
M. Boucher, N. Turcotte, V. Guillemette, G. Lantagne, A. Chapotot, G. Pourcelly, R. Sandeaux and C. Gavach 137

Determination of impurities in ilmenite ore and residues after leaching with HCl–ethylene glycol by energy dispersive X-ray fluorescence (EDXRF) spectrometry
S. Wongnawa, P. Boonsin and T. Sombatchaikul 161

Extraction and separation of Mn(II) and Zn(II) from sulphate solutions by sodium salt of Cyanex 272
N.B. Devi, K.C. Nathsarma and V. Chakravortty 169

Factorial experiments in the development of a kaolin bleaching process using thiourea in sulphuric acid solutions
F. Veglio' 181

Study of the extraction of gold(III) in aqueous hydrochloric acid media by the phosphine oxide Cyanex 925
M.A. Barroso, F.A. López, A. Sastre and F.J. Alguacil 199

Co-extraction and selective stripping of copper and nickel using LIX87QN
A. Sandhibigraha and P.V.R. Bhaskara Sarma 211
A study of the oxidative dissolution of synthetic copper–silver selenide minerals using the Intermittent Galvanostatic Polarisation (IGP) technique
R. Luo, N.M. Rice, N. Taylor and R. Gee 221
Recovery of ammonia and nitrate ion from ammonium nitrate in waste water by steam distillation adding lead(II) oxide
M. Uchida, N. Minakata and A. Okuwaki 239
The investigation of sulphuric acid sorption recovery of scandium and uranium from the red mud of alumina production
D.I. Smirnov and T.V. Molchanova 249
Ion exchange purification of manganese sulphate solutions from cobalt
A.G. Kholmogorov, O.N. Kononova, V.V. Patrushev, E.V. Mikhlina, Y.S. Kononov and G.L. Pashkov 261
Influence of various factors in the bioleaching of a bulk concentrate with mesophilic microorganisms in the presence of Ag(I)
C. Gómez, M.L. Blázquez and A. Ballester 271
Formation of lime-containing desilication product (DSP) in the Bayer process: factors influencing the laboratory modelling of DSP formation
B. Whittington and T. Fallows 289
Cobalt precipitation by reduction with sodium borohydride
J. Lu, D.B. Dreisinger and W.C. Cooper 305
Enhancement of acid extraction of magnesium and silicon from serpentine by mechanochemical treatment
Q. Zhang, K. Sugiyama and F. Saito 323
Separation technologies for metals recovery from industrial wastes
A.G. Chmielewski, T.S. Urbański and W. Migdał 333
Ultra high purification of copper chloride solutions by anion exchange
T. Kekesi and M. Isshiki 345

Announcement 363